

**COUNTY OF MILWAUKEE**  
**Inter-Office Communication**

**Date:** February 24, 2004  
**To:** John La Fave, Milwaukee County Register of Deeds  
**From:** Jerome J. Heer, Director of Audits  
**Subject:** Register of Deeds, Tax Listing Services Division

At your request, we have performed a limited review of the Tax Listing Services Division within your office.

**Background**

As specified in ss. 59.43, Wisconsin State Statutes, the Register of Deeds (RoD) is responsible for the recording, indexing and maintenance of public records related to real estate, individuals, and a number of miscellaneous items within Milwaukee County. The public records fall into one of the three main categories of real estate, vital statistics, and other. Fees for these activities are also enumerated within the Wisconsin Statutes. In most cases, the county and state share in the fees collected.

The Tax Listing Services Division (Tax Listing) reviews real estate property descriptions, assigns new tax key numbers due to real estate boundary changes, maintains plat books and property records, assists in the preparation of petitions for foreclosure action and provides copies of real estate document recordings to local assessors at \$1.20 per document. Additionally, because of its broad understanding of real estate document processing, Tax Listing staff may be called upon to assist with backlogs that develop in other areas within the RoD Office.

The 2004 Adopted Budget for the division is \$503,972 with a property tax levy requirement estimated at \$356,721. The division is staffed with five positions, one of which is currently vacant, and another position, which is funded by, and dedicated to, the Milwaukee County Automated Mapping Land and Information System (MCAMLIS).

**Observations and Analysis**

During our review we noted a number of opportunities for increased efficiency and savings in Tax Listing, as well as other areas within the Register of Deeds Office. These include the incorporation of updated technology, elimination of redundant tasks and pursuing other steps to streamline operations. However, we also noted instances in which the RoD faces significant, deeply

entrenched obstacles to achievement of greater overall efficiency. These concepts are addressed throughout the remainder of this memo.

#### Dependency on Multiple Information Systems

The primary factor contributing to a general lack of efficiency in Tax Listing operations is the RoD Office's dependence on three separate, but in many respects redundant, information systems. Each of the three systems, identified as the A-Card, TL01 and DocuTrak systems, are used for the same general purpose: to obtain certain parcel characteristics, either through referencing the location of an electronic or manual record, or by directly accessing the electronic record needed.

Although the three systems are used for the same general purpose, each system either covers a particular timeframe or contains an informational element not found in the other systems. For instance, the A-Card system, which consists entirely of manually prepared records, has been in place since the origin of Milwaukee County real estate recording and is used for documents recorded up to 1993. On the other hand, the TL01 system, implemented in 1993, contains information about documents recorded from 1993 through approximately 1999 and has property street addresses, but not digital copies of recorded documents. The DocuTrak system, implemented in 2000, contains information from 1988 to the present and has digital copies of recorded documents, but no street addresses.

This patchwork of three separate information systems is an obvious source of inefficiency for the Tax Listing function, as well as for other users of RoD data, such as the general public and title companies that perform property research. However, fully integrating the large volume of information into a single database may be cost prohibitive.

According to RoD staff, the strategy used when implementing the TL01 system in 1993 was to continue use of the A-Card system for prior recordings to avoid manual input of the massive volume of historical data contained on the A-Cards. The A-Card system continues to be used regularly by title companies, the Tax Listing Services Division and by other RoD staff.

The obvious drawback of the antiquated A-Card system is the inefficiency of workers having to leave their workstations to physically locate and review A-Cards. Beyond these inefficiencies, maintaining the approximately 115,000 A-Cards in hardcopy format makes them susceptible to loss or destruction.

Based on discussion with the Register of Deeds, the office is at a crossroads due to the pending retirement of a key staff member and the potential obsolescence of the current version of its real estate indexing and document image software system (DocuTrak). RoD has plans to upgrade DocuTrak in coming months. Given the poor linkage between the three information systems currently maintained by the RoD, and the offer of a free upgrade to the DocuTrak system that will provide opportunities for enhanced capabilities and efficiencies with little or no capital investment, we believe the Register of Deeds should proceed with its planned upgrade of that system, but focus on better integration of the data contained in its three separate information systems as the upgrade proceeds.

One alternative the RoD could consider is the manual input of A-Card data into a computerized format. This would require a significant manual data entry effort with the estimated number of A-Card entries approaching 500,000 (assuming four entries per card). One rough estimate from a local data entry vendor places the cost of this effort at about \$300,000. Because title companies are heavy users of the A-Card system, they may represent a potential source of funding for any conversion that would increase the efficiency of data access. Management would also have to determine the best method of accessibility. For instance, would the data be merged into the DocuTrak system and accessed using standard system features?

Another alternative for addressing the A-Card system problem is to scan these records into either microfilm or digital images. This would allow for viewing of these records at multiple workstations and provide sufficient backup against loss or destruction. However, since the information would be stored as document images, the benefits that result from computerization of the data would not be realized.

To provide a more efficient means to research historical documents and avoid the risk of loss of hardcopy documents, we recommend that RoD management:

- 1. Consider alternatives described above for converting A-Card data into an electronic digital image or microfilm format, including the possibility of obtaining partial funding for the conversion from title companies that use the A-Cards.*

The RoD Office's underlying strategy for implementation of the DocuTrak system in 2000 differed from the 'add-on' philosophy used in the TL01 system implementation seven years earlier. It was intended that the DocuTrak installation, with complete data conversion, would result in the elimination of the TL01 system. However, due to formatting and other data conversion problems, property addresses were not brought into DocuTrak and a portion of certain data elements were corrupted in the transfer. As a result, in many instances, users of recorded real estate documents must access both computer systems, and in some instances the A-Cards as well. Consequently, the TL01 system, while not updated with information since the conversion, continues to be utilized primarily for its address cross-referencing capabilities and as a source of information used to correct corrupted data when it is encountered in DocuTrak.

There is universal recognition of the inefficiencies and redundancy associated with the information systems maintained by the RoD. Following are alternatives to begin addressing this structural problem:

- Import or link the property addresses from the TL01 system, or from other sources, into DocuTrak. The DocuTrak software upgrade may facilitate this effort.
- Employ utility data comparison software to identify and correct instances of data corruption in DocuTrak. Again, improvements brought about by the DocuTrak software upgrade may facilitate this undertaking.

To achieve greater operating efficiency, provide better service to the public, and enable the RoD Office to utilize enhanced technology related to recorded property information through the elimination of the TL01 system, we recommend that RoD management:

- 2. Explore the options provided above as a means to transfer property address information into DocuTrak and proactively correct the corrupted data contained in that system.*

#### Computer System Upgrade

Boxes of original real estate documents are passed amongst work units within RoD for processing, involving various reviews, proofreading and recording functions. At the completion of processing, most documents are returned to the appropriate parties. In addition to the inefficiency of this process, the risk of document loss or damage is increased with multiple handling of the original papers. It currently takes about two months to complete document processing.

One responsibility of Tax Listing staff is to verify the accuracy of certain information contained on real estate documents. This includes the property's legal description, the grantor name, and parcel number. The information is reviewed to ensure consistency with existing information maintained by the RoD Office. This procedure is a time consuming, tedious task that requires the pulling of documents from a daily batch and their subsequent reinsertion into the batch in proper order. Similarly, other RoD staff verify the accuracy of document data by comparing a data entry report to the original document.

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A primary benefit of the planned DocuTrak system upgrade is the ability to display a split-screen on a computer terminal to view a digitized copy of a scanned document, as well as a system screen, simultaneously. This new capability should enable the streamlining of Tax Listing document reviews, document data entry verification, and document processing performed in other areas within the Register of Deeds Office.

Other opportunities for efficiency may become apparent as the DocuTrak upgrade is fully implemented. For example, office productivity could be enhanced if individuals performing data entry verification were allowed to input corrections directly into DocuTrak. This would eliminate delays associated with sending corrections back to the original data entry clerk for re-entry.

To achieve greater operating efficiency, reduce the risk of document loss, and provide better service to the public through faster document turnaround, we recommend that RoD management:

3. *Follow-through on its plans to upgrade the DocuTrak system and evaluate additional opportunities for efficiencies that may result from the resulting system enhancements.*
4. *Identify other tasks that can be performed more efficiently with electronic images.*
5. *Modify procedures that will support the elimination of the physical movement of documents in the RoD Office, including allowing individuals that perform data entry verification to input corrections directly into DocuTrak.*

#### Redundant Mapping Activities

Presently, two separate mapping functions are performed within the Tax Listing Services Division. The first is a manual function by which hardcopy maps are hand-drawn and maintained. The second involves electronic mapping with use of the County's Geographical Information System

(GIS), maintained by the Department of Parks and Public Infrastructure. The two mapping operations are independent of one another and each is staffed with one position. Milwaukee County has recently hired a consultant to advance Countywide utilization of the GIS. The RoD mapping functions are identified as a primary objective of this consulting engagement.

The manual mapping function includes all real estate parcels within the County except for those in the City of Milwaukee. As the official County maps of record, the County would incur a significant loss if these manual maps were destroyed or severely damaged. Furthermore, the drafting technician who has performed this function over the past several years has recently announced his plans to retire in mid-2004. However, because manual mapping has been widely replaced with the use of computer software, there are relatively few individuals with the skills necessary to do manual mapping. In addition to mapping, the drafting technician does limited technical review of preliminary maps for real estate combinations, subdivisions, certified survey maps and condominium plats.

Electronic mapping is a widely accepted technology for maintaining land records. The electronic mapping function performed within the RoD Office utilizes a multipurpose database system operated in conjunction with the Milwaukee County Automated Mapping and Land Information System (MCAMLIS). The system contains considerably more information and has far more utility than the manual mapping function. Although the County's electronic mapping function maintains digital maps of substantially all parcels within Milwaukee County, and uses RoD data to update the maps, the system is used solely for purposes outside of the Register of Deeds functions.

While the manual and electronic mapping functions operate independently, there is significant redundancy between them. Both functions utilize the same RoD source information to update its maps and the electronically maintained maps contain the same informational elements as the manual maps. Consequently, this redundancy, and possibly one funded position, could be eliminated if manual mapping was discontinued in favor of electronic mapping. In addition, discontinuance of manual mapping would eliminate the need to find an individual with the outdated manual skills needed as a replacement for the impending retirement of the drafting technician. In addition to these benefits, electronic mapping offers maps with greater capabilities and flexibility in many areas. For instance, changes to scale, reproduction, and internet accessibility are all made easier. Furthermore, electronic maps possess a higher degree of accuracy due to controls built into the software. Electronic mapping would also require significantly less storage space and provide effective protection from loss.

In moving to electronic mapping, however, several issues must first be addressed. These include:

- The County's right to charge a fee for the digital information must be established. The digital information appears to have been copyrighted by utilities that provided initial funding for the MCAMLIS project. Currently, fees for hard copies of digitized maps are paid to MCAMLIS. However, the electronic mapping information has in many cases been updated with the support of public funds. A determination should be made as to whether the data comes under open records laws, whether the County could charge a fee for provision of, or access to, the mapping information, the appropriate fees to charge, etc.
- Standards/specifications of electronic maps used for Register of Deeds purposes would need to be determined. The consultant engaged by DPPI may be of great assistance in this area.
- Reviews of preliminary plat changes currently performed by the RoD drafting technician may duplicate work performed by others, such as municipal zoning officials and certified architects. The Register of Deeds should explore the possibility of eliminating these reviews. A final review for delinquent taxes might need to be assigned to another individual in the RoD Office.

To achieve savings through the elimination of redundant activities and realize the benefits associated with existing County mapping technology, we recommend that RoD Management:

6. *Work with Corporation Counsel and the Department of Parks and Public Infrastructure to address the issues noted above and advance towards a transition to the sole use of electronic parcel mapping.*

If the RoD Office successfully transitions to an electronic mapping environment, additional procedural changes will be desirable. For instance, further efficiencies could be gained by requiring that requests for recording large scale transactions involving the altering of parcel boundaries be submitted to the RoD Office in electronic format.

#### Providing Photocopies to Municipalities

One of the other tasks performed within the Tax Listing function is the provision of reduced size photocopies of certain documents to the non-city of Milwaukee municipalities within Milwaukee County. Because the municipalities have different photocopying needs, RoD staff must sort the various documents according to those specific needs. Some documents are multi-paged with the municipality requesting only certain pages. A fee of \$1.20 per document (set in 1988) is charged for each document photocopied. This activity generates about \$15,000 of revenue for the RoD annually. If it is assumed that it takes just five minutes per document to sort, obtain, copy and re-file the documents in question, we estimate the RoD's cost of providing this service totals about \$33,000, or more than twice the amount of revenue at the current fee of \$1.20 per document.

To improve the process related to the provision of reduced size copies of documents to municipalities, we recommend that RoD management:

7. *Determine if the required documents can be extracted from the digital data sold to commercial entities and inform the municipalities that digital copies will be provided at a fee to cover the cost of preparing the copies. If this information cannot be extracted from digital data, the copying fee to municipalities should be adjusted to more accurately reflect the cost of providing the service.*

#### Transfer of City of Milwaukee Functions

As described earlier, the Milwaukee County RoD Office performs Tax Listing functions, as well as other services, for all municipalities within the County, with the sole exception of the City of Milwaukee. The City performs similar functions for all real estate parcels within its boundaries.

A City of Milwaukee official has indicated possible interest in transferring these similar functions to the Milwaukee County Register of Deeds. In theory, a consolidation of like services would result in savings that could be shared between the City and County.

However, as noted throughout this memo, the County Register of Deeds Office needs to make significant strides, particularly in its Tax Listing area, to increase operational efficiency, upgrade and rectify issues associated with its information systems, and ultimately improve its service to the public. Further, assumption of like duties from the City of Milwaukee would require integration of data from yet another separate information system. With the limited resources available at this time, and until the issues identified in this memo are addressed, we believe it would be premature for the County Register of Deeds Office to consider the transfer of any City of Milwaukee functions.

We wish to thank you and your staff for the cooperation provided during this review.



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Director of Audits

JJH/cah

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